INNOVATION PLACE.

THE scene
news and happenings around the parks

June 2007

Raum Energy - Harnessing the wind

Not that long ago, windmills dotted the prairie landscape. If Darryl Jessie and his team at Raum Energy have their way, small windmills will once again be a common sight, supplying and supplementing power for farmers, acreage owners and cottage owners across Saskatchewan. But these will be windmills with a difference.

"The key," said Jessie "is an inverter designed specifically for a smaller turbine that is unusually efficient at converting wind energy into electricity at both the extreme high and low ends of wind speed." Raum also developed a lightweight generator and a high-efficiency turbine blade, creating the next generation of windmills for domestic consumption use. They are the only company in Canada that designs and manufactures a complete wind energy system.

Raum Energy arose from Jessie's frustration in trying to find a windmill for his own acreage. Recognizing he wasn't alone in his search, he hired three U of S engineering alumni and started the new venture. "We haven't done any marketing at all, but the word is out there and we've got 30 people lined up, just waiting for us to go into production."

Just 15 months after incorporating, the first prototype is up and running southeast of Saskatoon and later this summer more are going up across the province for real life testing. If all goes as planned, Jessie expects to have at least 100 sales by 2008. "I get a call a day and the first thing they ask is when will the windmills be available," said Jessie. "For these people, cost seems a secondary concern."

continued on page 2 . . .

raum ENERGY

Innovation Place
230 - 111 Research Drive
Saskatoon, SK

Contact:
Darryl Jessie
651-0594
contact@raumenergy.com

www.raumenergy.com

Raum Energy is a new force in the Canadian wind industry, specializing in small wind turbine research, design and manufacturing as well as grid-tie inverter design and manufacturing, turbine blade design, permanent magnet generator design, atmospheric fluid flow analysis, and economic studies of wind energy.

Strengthening the bio-economy

Saskatchewan can be a global leader in the bio-economy by focusing on two main areas: 1) biofuels and bio-products, and 2) nutrition, health and wellness. The Conference Board of Canada (CBC) conclusion comes after consultations with more than 100 life science leaders throughout the province, and an examination of national and international opportunities.

Both priority areas identified by the CBC build on Saskatchewan's unparalleled access to agricultural and biological resources, and existing research capacity. The report also concluded that contract research services and early stage companies focused on immunology and vaccines are crucial to the development of Saskatchewan's bio-economy.

Along with identifying the two priority areas, the report makes 20 specific but wide-ranging recommendations including:

- Building leadership in priority areas;
- Capitalizing on strengths in immunology and vaccines, and contract research services;
- Increasing investment in research and development;
- Developing, attracting and retaining talent;
- Increasing the number and strength of Saskatchewan's life science companies;
- Attracting risk capital; and
- Communicating the strengths of Saskatchewan in the life sciences.

The report urges Saskatchewan to establish an industry-led biofuels and bio-products centre to champion the industry and enable world-leading research and commercialization efforts.

For more detailed information about the Conference Board of Canada study on Saskatchewan's bio-economy, please go to *www.agwest.sk.ca/publications*.

Investing in the bio-economy

Quantum Genetics Canada Inc. (QGCI) received a $300,000 investment from Ag-West Bio's commercialization fund to market its diagnostic product to the U.S. feedlot industry.

The diagnostic tool is used to predict the right time to ship market ready cattle. QCGI offers individual animal management protocols by managing the animal's genetic propensity to deposit fat. Proprietary models were developed to predict how the animal will develop fat, depending on its genotype. QCGI then provides the producer with the market ready date for each animal to optimize production efficiencies and economic value.

"We are also working to advance second generation products that incorporate more information to further add value to feedlot operators and maintain environmental sustainability," said Leigh Marquess, Chief Operating Officer at QGCI.

QGCI was established in 2003 and is commercializing technology discovered and developed at the College of Agriculture and Bioresources at the University of Saskatchewan. They are located in the L.F. Kristjanson Biotechnology Complex at Innovation Place in Saskatoon. QGCI employs a staff of nine people, seven of whom are graduates of the University of Saskatchewan.

Welcome to new clients

Community Futures Partners of Saskatchewan
207 – 116 Research Drive
Saskatoon
Focusing on building community economic and entrepreneurial capacity.

Saskatchewan Ethanol Development Council Inc.
238 – 111 Research Drive
Saskatoon
Promoting and coordinating efforts to develop a profitable and sustainable ethanol industry in Saskatchewan.

Visens Materials Solutions Inc.
326 – 111 Research Drive
Saskatoon
Providing materials testing, analysis, modeling and manufacturing solutions and services for the agricultural, heavy industry, petrochemical, mining and forestry sector.

MSC Material Synthesis Corp.
127F – 116 Research Drive
Saskatoon
Providing customized solutions with chemical solvents.

Raum Energy

. . . continued from page 1

According to Jessie, "These windmills are the only electrical appliance you will ever buy that will pay for themselves." A 1.1 kilowatt windmill, the smallest size Raum Energy will be making, is expected to supply 25 to 30 per cent of the electricity for an average acreage.

Along with designing and building new windmills, Raum Energy also performs wind energy assessments and economic studies for larger wind energy applications.

If you would like to receive an electronic version of THE SCENE please e-mail info@innovationplace.com.

Awarding Innovation

Inflammatory diseases, like arthritis and cystic fibrosis, have traditionally been treated with corticosteroids. Unfortunately, while steroids are effective treatment options, they often come with a litany of side effects that can limit their usage.

This year's Award of Innovation winners in Saskatoon, John Gordon and Fang Li, have found a promising anti-inflammatory alternative to corticosteroids that could help alleviate suffering for millions of people. The two immunologists from the Western College of Veterinary Medicine won the $5,000 cash prize to help them continue development work on the protein they discovered, G31P, which targets inflammation associated with neutrophils, a type of white blood cell.

Gordon is working with IL Therapeutics on advancing the protein as an approved pharmaceutical, and he has been awarded $242,000 from the Canadian Institutes of Health Research to further the work. The Vancouver-based company plans to begin clinical trials with human volunteers soon.

The Award of Innovation in Saskatoon is an annual competition sponsored by Innovation Place and the University of Saskatchewan Industry Liaison Office. Presented at the SABEX awards, it is designed to recognize the efforts of University of Saskatchewan researchers whose work has commercial potential as marketable products.

picture at right: The University of Saskatchewan's Dr. John Gordon (centre) accepts the 2007 Award of Innovation from Doug Gill, Director of the University of Saskatchewan Industry Liaison Office (left), and Jackie Presnell, Director, Marketing, for Innovation Place (right).

TinyEYE Technologies Corp - SABEX award winner

In his acceptance speech for the 2007 Greater Saskatoon Chamber of Commerce SABEX Award for New Product, Greg Sutton thanked his mother for giving him three pieces of advice: dream and set goals to make that dream a reality; work hard; don't fight with your sisters.

A little more than two years ago, Sutton took all that advice to heart when he and his sister Marnee Brick first started working on what would become TinyEYE Technologies Corporation. "My sister is a speech therapist and it seemed like a lot of her evenings and weekends were spent writing up reports from her client visits," said Sutton. "We wanted to come up with a solution to this well-document industry problem."

Together Sutton and Brick developed on-line software for speech-language pathologists. When used with a head-set and web camera, it connects therapists with their clients allowing them to play games and do exercises together. It then generates reports on the spot. "It eliminates or reduces driving time and it eliminates or reduces reporting time," said Sutton. "By getting rid of those two limiting factors, our program allows speech-language pathologists to see more clients and waiting lists are cut way back."

The technology is also ideal for use in remote communities. Already TinyEYE Technology is being used in four communities in Northern Saskatchewan. They also have clients in Ontario, Florida and California.

As for his mother's advice - Sutton continues to set goals, exploring opportunities to expand TinyEYE into other educational and non-contact healthcare areas. As President and CEO of TinyEYE Technologies he continues to work hard, and he's getting along just great with this sisters. With the company growing rapidly he's more than nappy to have one sister on board as Vice President of Product Development and another as Client Relationship Manager. "Mom's pretty proud."

For more information about TinyEYE technology, please visit *www.tinyeye.com*.

Below: A view of the Garden Park in Saskatoon

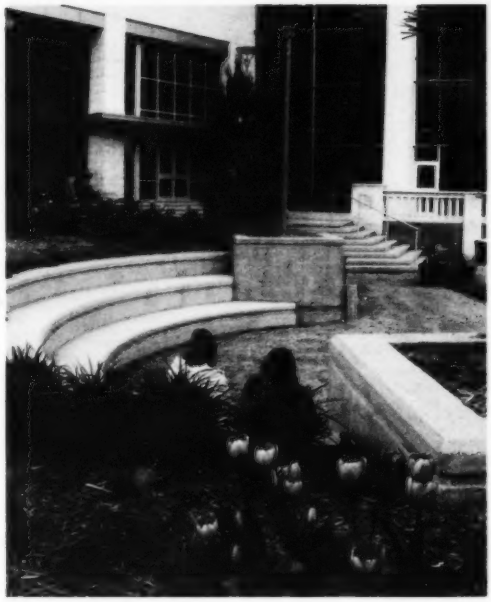
Western Grains Research Foundation – Talking to prairie farmers

Both farming and communication technology have seen some big changes since the Western Grains Research Foundation (WGRF) was established 25 years ago. But the mandate of the WGRF has never wavered; funding research to develop new grain varieties directly benefiting prairie farmers, and making sure they know about it.

Despite the many options for communicating with producers, WGRF Communications Manager Amanda Soulodre has found that good old fashioned face to face conversations are particularly effective. And that's why WGRF can be found at more and more agricultural-related trade shows. "Not only do farmers get to learn about the exciting research and the varieties being developed, but we also get to hear their thoughts on issues facing farmers today," said Soulodre. "That information is taken back to our board and used when making important decisions for the future."

WGRF is a farmer funded and directed organization with $4 to $5 million in annual base funding. That money is invested in public breeding programs across Western Canada that work toward the development of new wheat and barley varieties. Shorter-term research projects are also funded based on scientific merit and direct benefit to farmers.

You can learn more about the Western Grains Research Foundation at *www.westerngrains.com*, or stop by their booth number 3401 in Banner Hall, at the Farm Progress Show in Regina on June 20 – 22.



Clients at the research park in Regina enjoy an outdoor break surrounded by late spring flowers. Grounds crews have been busy putting almost 1,000 annual plants into the raised beds and planters to ensure a colourful summer.